Datasheet for ABIN3044709

ADA ELISA Kit

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Overview

Quantity:	96 tests
Target:	ADA
Binding Specificity:	AA 2-363
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	15.6-1000 pg/mL
Minimum Detection Limit:	15.6 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human ADA
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Tissue Homogenate, Serum, Pleural Fluid
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Immunogen sequence: A2-L363
Specificity:	Expression system for standard: sf21 Immunogen sequence: A2-L363
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<10pg/mL

Product Details

Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl

Target Details

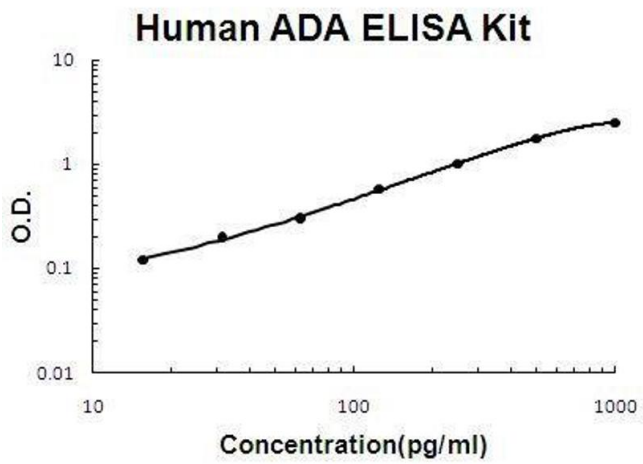
Target:	ADA
Alternative Name:	ADA (ADA Products)
Background:	Protein Function: Catalyzes the hydrolytic deamination of adenosine and 2- deoxyadenosine. Plays an important role in purine metabolism and in adenosine homeostasis. Modulates signaling by extracellular adenosine, and so contributes indirectly to cellular signaling events. Acts as a positive regulator of T-cell coactivation, by binding DPP4. Its interaction with DPP4 regulates lymphocyte- epithelial cell adhesion. . Background: Adenosine Deaminase (also known as adenosine aminohydrolase, or ADA) is an enzyme involved in purine metabolism. It is needed for the breakdown of adenosine from food and for the turnover of nucleic acids in tissues. ADA in humans is involved in the development and maintenance of the immune system. However, ADA association has also been observed with epithelial cell differentiation, neurotransmission, and gestation maintenance. It has also been proposed that ADA, in addition to adenosine breakdown, stimulates release of excitatory amino acids and is necessary to the coupling of A1 adenosine receptors and heterotrimeric G proteins. Adenosine deaminase deficiency leads to pulmonary fibrosis, suggesting that chronic exposure to high levels of adenosine can exacerbate inflammation responses rather than suppressing them. It has also been recognized that adenosine deaminase protein and activity is upregulated in mouse hearts that overexpress HIF-1 alpha, which in part explains the attenuated levels of adenosine in HIF-1 alpha expressing hearts during ischemic stress. Synonyms: Adenosine deaminase,3.5.4.4,Adenosine aminohydrolase,ADA,ADA1, Full Gene Name: Adenosine deaminase Cellular Localisation: Cell membrane, Peripheral membrane protein, Extracellular side. Cell junction. Cytoplasmic vesicle lumen . Cytoplasm . Colocalized with DPP4 at the cell junction in lymphocyte-epithelial cell adhesion.
Gene ID:	100
UniProt:	P00813
Pathways:	Regulation of G-Protein Coupled Receptor Protein Signaling, Ribonucleoside Biosynthetic Process

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Found in all tissues, occurs in large amounts in T-lymphocytes and, at the time of weaning, in gastrointestinal tissues.
Plate:	Pre-coated
Protocol:	human ADA ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for ADA has been precoated onto 96-well plates. Standards(Expression system for standard: sf21, Immunogen sequence: A2-L363) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for ADA is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human ADA amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL, 15.6pg/mL human ADA standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum, tissue homogenates or pleural fluid to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human ADA standard solution and each sample be measured in duplicate.
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	4 °C,-20 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months



ELISA

Image 1. Human ADA PicoKine ELISA Kit standard curve